

PROVIDENCE SEWAGE TREATMENT SYSTEM,
Ernest Street Pumping Station, Filth Hoist House
Ernest Street and Allens Avenue
Providence
Providence County
Rhode Island

HAER No. RI-20-B

HAER
RI
4-PROV,
1918-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Mid-Atlantic Region
Department of the Interior
Philadelphia, Pennsylvania 19106

HAER
RI
4-PROV,
191B-

HISTORIC AMERICAN ENGINEERING RECORD
PROVIDENCE SEWAGE TREATMENT SYSTEM:
Ernest Street Pumping Station, Filth Hoist House

HAER NO. RI-20-B

LOCATION: Ernest Street and Allens Avenue
Providence, Providence County, Rhode
Island
UTM:19.300780.462570
Quad: Providence, RI

DATE OF CONSTRUCTION: 1895-1896

ENGINEER: J. Herbert Shedd

PRESENT OWNER: Narragansett Bay Commission
44 Washington Street, Providence, RI

PRESENT USE: In process of remodeling as a stand-by
power generating facility.

SIGNIFICANCE: This structure was built in association
with the Ernest Street Pumping Station
which pumped sewage to Providence's
Fields Point Plant for treatment. It
provided the first "screening" of sewage
as it moved toward treatment, and as
such was integral to the operation of
the facility.

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ERNEST STREET PUMPING STATION, FILTH HOIST HOUSE
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DESCRIPTION:

The Filth Hoist House, also known as the screen house, is one of three structures comprising the Ernest Street Pumping Station (see HAER No. RI-20-A and HAER NO. RI-20-C). The filth hoist house is located immediately off the northwest corner of the engine house. It is a nearly square (24 feet by 27 feet) structure, with 19-foot walls and slate covered hipped roof. The exterior walls are constructed of red Barrington brick. Indiana limestone is used for the raised water table, to create broad belt coursing and a wide modillion cornice, and to form modified Gibbs surrounds at the window openings.

The interior of the screen house has painted brick walls and concrete floor. In the concrete substructure are positioned metal screens through which sewage flows to the wet well (which lies on either side of the north wall of the pump house and is part of the substructure). Debris and rags are captured in the screens. The superstructure above contains the mechanism by which this filth is literally "hoisted" by a long rake or mechanical comb out of the screens.

HISTORICAL INFORMATION:

The filth hoist house was constructed in 1895-6 as part of the City of Providence's sewage pumping station at Ernest Street. In its original operation, sewage arriving at the station through an 8.5-foot intercepting sewer had to pass through four steel filth hoist cages (contained within the substructure), which trapped "coarse and bulky material over 2 inches in diameter". Each cage was about three feet wide, 8.5-feet high, and semicircular in plan, and could be raised either manually or by a small electric motor for cleaning. Sewage passing through the cages entered a long screen chamber, located between the engine house and boiler house, from which it passed through inlet wells to the pumps. Although the original filth hoist cages have been replaced, the building continues to perform its original function.

BIBLIOGRAPHY:

Pike, Lynne M. Historical Background of Ernest Street Pump Station. Ms on file at Narragansett Bay Commission, October 1985.

City Engineer, Providence. Annual Report for 1896.

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Narragansett Bay Commission, Drawing Files: "Buildings for Ernest Street Pumping Station," three sheets dated August 1895; also FP-65, FP-79, FP-104, FP-146-149.

